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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant:	Attila Grauzer, et al.	Examiner:	HALL, Arthur O.
Serial No.	10/623,223	Group Art Unit:	3709
Filed:	July 17, 2004	Docket No.	PA0863.ap.US
Title:	CARD SHUFFLER WITH CARD RANK AND VALUE READING		

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES****MAIL STOP: APPEAL BRIEF - PATENTS**

P.O. BOX 1450

Commissioner for Patents

Alexandria, VA22313-1450

Sir:

The U.S. Patent and Trademark Office is hereby authorized to debit any costs and fees associated with this Petition to Deposit Account No. 50-1391. Appellant(s) is submitting this single copy of the Appeal Brief in Compliance with the requirements of 37 CFR 41.37(c). Appellant requests a personal appearance at the Board of Appeals, but will defer payment of the fee until after receipt of the Examiner's Answer.

This Appeal is being filed in response to the FINAL Office Action mailed 22 DECEMBER 2008.

CERTIFICATE UNDER 37 C.F.R. 1.8: The undersigned hereby certifies that this Transmittal Letter and the paper, as described herein, are being sent by facsimile transmission or deposited in the United States Postal Service, as first class mail, with sufficient postage, in an envelope addressed to: MAIL STOP: APPEAL BRIEF - PATENTS, P.O. BOX 1450, Commissioner for Patents, Alexandria, VA 22313-1450 22 JULY, 2009

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**TABLE OF CONTENTS**

1. Real party in interest	page(s)	3
2. Related appeals and interferences	page(s)	4
3. Status of claims	page(s)	5
4. Status of amendments	page(s)	6
5. Summary of claimed subject matter	page(s)	7-10
6. Grounds of rejection to be reviewed on appeal	page(s)	11
7. Argument	page(s)	12-27
8. Claims appendix	page(s)	28-34
9. Evidence appendix	page(s)	35
10. Related proceedings appendix	page(s)	36

**REAL PARTY IN INTEREST**

The real party in interest in this Appeal is the assignee of the full right, title and interest in this Application, Shuffle Master, Inc., having a place of business at 1106 Palms Airport Drive, Las Vegas, Nevada 89119-3730.

**RELATED APPEALS AND INTERFERENCES**

The Appellant(s), the legal representative prosecuting this application and Appeal, and the assignee are not aware of any Appeals or Interferences that will directly affect or have a bearing on the Board's of Patent Appeals and Interferences decision in this pending Appeal.

**STATUS OF CLAIMS**

Claims 1-22, 30, 37-38, 43-45, and 55 are on Appeal.

Claims 23-29, 31-36, 39-42 and 46-54 have been canceled.

**STATUS OF AMENDMENTS**

An Amendment After Final Rejection was submitted consisting of a replacement figure (Figure 10) and arguments. No amendments to the claims were made in the response to final rejection. All amendments submitted during the prosecution of the application have been accepted without objection.

**SUMMARY OF CLAIMED SUBJECT MATTER**

**Claim 1** - A device for forming a random set of playing cards comprising:

a top surface and a bottom surface of said device; [Page 8, lines 22-24]

a single card receiving area for receiving an initial set of playing cards with access to the single card receiving area at the top surface; [Page 8, lines 22-24, Figure 1]

a randomizing system for randomizing the order of an initial set of playing cards; [Page 8, lines 26-27]

a single card collection surface in a card collection area for receiving randomized playing cards one at a time into the card collection area, [Page 8, lines 27-29, Figure 1] the collection surface receiving cards so that all cards are received below the top surface of the device with access to the card collection surface being from the same top surface as the single card receiving area; [Page 8, lines 27-29, Figure 1]

the device moving individual playing cards one at a time directly to the single card collection surface; [Page 15, lines 11-14]

an image capture device that reads the rank and suit of each card before being received on the card collection surface; [Page 8, lines 24-26, Figure 1]

an elevator for raising the single card collection surface so that at least some randomized cards are elevated for removal from the top surface of the device; and [Page 8, line 29 through page 9, line 4]

a moveable cover over the elevator and fixed along one edge of the cover to the top surface. [Page 49, lines 7-11; Figures 6 and 7]

**Claim 30** - A device for forming a random set of playing cards comprising:

a top surface and a bottom surface of said device; [Page 8, lines 22-24]

a single card receiving area for receiving an initial set of playing cards; [Page 8, lines 22-24, Figure 1]

a randomizing system for randomizing the order of an initial set of playing cards; [Page 8, lines 26-27]

a collection surface in a card collection area for receiving randomized playing cards one at a time into the card collection area directly from the single card receiving

area, the collection surface receiving cards so that all cards are received below the top surface of the device; [Page 8, lines 27-29, Figure 1]

an image capture device that reads the rank and suit of each card after it has begun leaving the single card receiving area and before being received on the card collection surface; [Page 8, lines 24-26, Figure 1]

an elevator for raising the collection surface so that at least some randomized cards are elevated for manual removal of playing cards from the top surface of the device; and [Page 8, line 29 through page 9, line 4]

a moveable cover over the elevator and fixed along one edge of the cover to the top surface. [Page 49, lines 7-1; Figures 6 and 71]

**Claim 37** - A method of randomizing a group of cards, comprising the steps of:

placing a group of cards to be randomized into a card in-feed tray of a playing card randomizing device; [Page 47, lines 15-29]

removing cards individually from the card in-feed tray and delivering the cards directly and one-at-a-time into a card collection area, the card collection area having only a single moveable lower surface, and a stationary opening for receiving cards from the in-feed tray; [Page 31, lines 9-12; Page 47, lines 15-29]

elevating the moveable lower surface to a randomly determined height; [Page 8, line 29 through page 9, line 4; Page 47, lines 15-29]

grasping at least one edge of a group of cards in the card collection area at a point just above the stationary opening; [Page 47, lines 15-29]

lowering the moveable lower surface to create an opening in a stack of cards formed on the lower surface, the opening located just beneath a lowermost point where the cards are grasped; [Page 47, lines 15-29]

inserting a card removed from the in-feed tray into the opening; [Page 47, lines 15-29]

after randomizing all cards, elevating a collection of randomized cards seated on the single moveable card collection surface so that the randomized cards may be manually removed from a top of the playing card randomizing device; and [Page 56, line 28 through page 57, line 3;



reading at least the rank of each card after it is individually removed from the card in-feed tray and before it has been inserted into the opening. [Page 8, lines 24-26]

**Claim 43** - An automatic card shuffler comprising:

- a housing capable of being mounted flush with a gaming table surface; [Page 30, lines 25-27]
- a card receiver for accepting a group of cards to be shuffled by insertion of cards from an opening level with the gaming table surface; [Page 31, lines 1-7]
- a randomizing system for randomizing the order of an initial set of playing cards; [Page 8, lines 26-27]
- a single collection surface for receiving all randomized cards; [Page 8, lines 27-29, Figure 1]
- an elevator for raising the single collection surface to an elevation proximate wherein all randomized cards may be manually removed through the gaming table surface; [Page 8, line 29 through page 9, line 4]
- a moveable cover hinged along one edge of the cover and moveable above the elevator; and [Page 49, lines 7-11; Figures 6 and 7]
- a microprocessor for controlling the operation of the card shuffler. [Page 31, lines 10-17]

**Claim 45** - An automatic card shuffler, comprising:

- a microprocessor; [Page 31, lines 10-17]
- a card randomization mechanism; [Page 8, lines 26-27]
- a controller for controlling the card randomization mechanism by means of a user-manipulated remote control device; and [Page 54, lines 5-11]
- a card moving sequence programmed in memory that enables the automatic card shuffler to move a set of cards from a card receiving position to a card collection area in the shuffler in a non-shuffling event, [Page 1, lines 20-21] and to read the rank and suit of each card between the card receiving position and the card collection area in the non-shuffling event. [Page 9, lines 10-15; Page 1, lines 20-21 ('verify')]

**Claim 55** - A device for forming a random set of playing cards comprising:

a top surface and a bottom surface of said device; [Page 8, lines 22-24]

a single card receiving area for receiving an initial set of playing cards; [Page 8, lines 22-24, Figure 1]

a randomizing system for randomizing the order of an initial set of playing cards; [Page 8, lines 26-27]

a single collection surface in a card collection area for receiving randomized playing cards one at a time into the card collection area, [Page 8, lines 27-29, Figure 1] the collection surface receiving cards so that all cards are received above the single collection surface and below the top surface of the device; [Page 8, lines 27-29, Figure 1]

an elevator for raising the single collection surface to raise at least some randomized cards; and [Page 8, line 29 through page 9, line 4]

a moveable cover hinged along one edge of the cover and moveable over the elevator. [Page 49, lines 7-11; Figures 6 and 7]

**GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

Solely for the purposes of expediting this Appeal and complying with the requirements of 37 C.F.R. 1.192(c)(7), the following grouping of claims is presented. This grouping is not intended to constitute any admission on the record that claims within groups may or may not be independently asserted in subsequent litigation or that for any judicial determination other than this Appeal, the claims may or may not stand by themselves against any challenge to their validity or enforceability.

1. Claims 1-13, 22-25, 29-30, 37-38, 43-45 and 55 have been rejected under 35 USC 103(a) as unpatentable over U.S. Patent No. 6,250,632 (Albrecht) in view of U.S. Patent No. 5,683,085 (Johnson '085) when further in view of U.S. Patent No. 5,240,140 (Huen).
2. Claims 14-21 and 26-28 have been rejected under 35 USC 103(a) as unpatentable over Johnson '248 in view of Albrecht and further in view of Johnson 5,683,085 when further in view of U.S. Patent No. 5,240,140 (Huen) and even when further considered with Purton et al. (International Patent Application Publication WO 00/51076) [**Applicants note the U.S. equivalent of Purton et al. as U.S. Patent No. 6,629,894**].

**ARGUMENT**

1. Claims 1-13, 22-25, 29-30, 37-38, 43-45 and 55 have been rejected under 35 USC 103(a) as unpatentable over U.S. Patent No. 6,250,632 (Albrecht) in view of U.S. Patent No. 5,683,085 (Johnson '085) when further in view of U.S. Patent No. 5,240,140 (Huen).

**It is first to be noted that the rejection of record attempts to identify limitations in the claims, and then finds the individual limitations in one of three references, and then asserts that it is obvious to combine the structure of those limitations together to meet (teach to be obvious) the collective limitations of the claims. This attempted combination is not done with any reasoned or scientific analysis of the methodology of associating different structures. Each successive reference combined tends to require the destruction and/or removal of the underlying structure needed for the benefits of the disclosed invention of that reference. The underlying combination, by such a random, self-destructing attempt to combine references must fail under 35 U.S.C. 103(a). Specific examples of the difficulty if not impossibility of these combinations will be pointed out in the arguments below.**

As is always the situation where a combination of references has been cited under 35 USC 103(a) against claims of an application, it is essential to compare the actual limitations of the claims and the actual teachings of the cited references in the order in which they were combined. In the present case, this analysis will begin with the independent claims that have been rejected under this statutory provision in view of Albrecht

CLAIM 1	ALBRECHT	COMMENTS
A device for forming a random set of playing cards comprising:		This function of a device is disclosed by Albrecht.
a top surface and a bottom surface of said device;		All physical apparatus have a nominative top and bottom.

a single card receiving area for receiving an initial set of playing cards <u>with access to the single card receiving area at the top surface;</u>	Albrecht has a single card receiving area 26, but it is fixed at a side of the device (Figure 1a) and not at the same elevation as the top of the device.	By being at the side, there can be no access through the top of the device as recited in the claim.
a randomizing system for randomizing the order of an initial set of playing cards;		This function can be provided by Albrecht.
a single card collection surface in a card collection area for receiving randomized playing cards one at a time into the card collection area, the collection surface receiving cards so that all cards are received below the top surface of the device <u>with access to the card collection surface being from the same top surface as the single card receiving area;</u>	Albrecht has a single card collection surface 36 below the top of the device (Figure 1a). There is an opening 46 for access to the cards at the top of the device. HOWEVER, the access to the card collection area can be at the top surface, but there is no top surface position for the card receiving area and so no "same top surface" as recited in the claim. The access to the card collection surface must be at a higher elevation than the elevator surface 36 of the card collection area.	As the card receiving area is NOT at the top of the device, the card receiving area access cannot be from the "same top surface" as recited in claim 1. These limitations are not shown in their entirety by Albrecht in view of Johnson '085. Johnson and Albrecht have card insertion surfaces at heights and positions that are NOT at the same top surface as the removal area.
<u>the device moving individual playing cards one at a time directly to the single card collection surface;</u>	Albrecht moves cards from the card insert area 26 one-at-a-time into the collection compartments 32.	HOWEVER, The Albrecht structure does NOT move cards one-at-a-time onto a single collection surface, but moves them one-at-a-time into different compartments 32 as opposed to Applicants' recitation in the claims of a single card collection surface. Albrecht does not move cards one-at-a-time onto a single card collection surface. Rather groups of cards are collectively dumped onto a

		<b>single collection surface 36. THIS LIMITATION OF APPLICANTS' CLAIM IS NOT SHOWN BY ALBRECHT.</b>
an image capture device that reads the rank and suit of each card before being received on the card collection surface;	<b>Abstract</b> – “One embodiment provides a deck holding area in which cards are held for presenting a card to a read head for reading the characters on the face of the card.”	
an elevator for raising the single card collection surface so that at least some randomized cards are elevated for removal from the top surface of the device; and	“...a platform motor 44 is activated raising 45 (FIG. 2) the platform 36 and the sorted deck 42 to the deck removal area 46 (as shown in FIG. 5d).”	<b>There is an elevator in Albrecht for raising the ultimate collection surface so that randomized cards are elevated at least to the top surface. This is NOT a collection surface onto which cards were moved one-at-a-time as recited in the claims. This will be shown more clearly in the arguments below.</b>
a moveable cover over the elevator <u>and fixed along one edge of the cover to the top surface.</u>		<b>There is no moveable cover over the elevator of Albrecht. This feature alone is clearly novel and shown to be unobvious over the combination of references.</b>

The rejection acknowledges only that Albrecht does not disclose “...the randomizing system and gripping arm as claimed” and therefore references Johnson ‘085. It is clear that the rejection is fundamentally in error from the initial steps in the analysis as limitations not present in claim 1 are considered (the randomizing system and gripping arms and the capability of being flush mounted, **none of which are in claim 1**). These references and acknowledgment of lack of limitations are spurious and incomplete. Furthermore, Albrecht clearly does not show the cover.

As should be readily seen, the Office action fails to acknowledge the presence of actual limitations in claim 1 that Albrecht fails to teach. In doing so the Office Action fails to even consider and does not disclose certain limitations (e.g., **the moveable cover**

and elevator for moving a SINGLE card collection surface) of claim 1 and all claims dependent therefrom. This rejection, with respect to claim 1 and all claims dependent therefrom is clearly in error unless the additional references teach these limitations that are missing from Albrecht. It will be clearly shown that the references **do not teach those limitations and/or the references cannot be combined with Albrecht.**

Johnson '085 does not teach a moveable hinged cover over the elevator. That reference cannot correct the deficiencies of the underlying citation of Albrecht.

Huen shows a card dispenser with a lid. The lid is actually the card-moving functional component in the dispenser, with prongs/grips 25 pushing cards out of the dispenser, one-at-a-time. Additionally, the lid of Huen is not over an elevator and only moves cards out of the device through slots 17 on the side of the device. It does not sit over an elevator in a card collection surface. The cover system of Huen is therefore not located in the area recited in the claim, performs functions not allowed in the present claims (The lid of Huen a) covers the card in-feed area and b) moves individual cards out of the device while the claims require the cover to allow access over a card collection surface) [output area]. **Therefore, even if the individually selected components actually disclosed by Albrecht, Johnson '085 and Huen were combined, they would not meet the limitations of the claims. Additional design work, additional functionality and additional structural elements would have to be added. THERE IS NO OBVIOUSNESS FROM THIS COMBINATION OF REFERENCES.**

Huen therefore:

- 1) does not show card removal through an upper surface (it dispenses cards sideways through a slot, one-at-a-time);
- 2) does not have a card collection surface on an elevator;
- 3) does not have an elevator in a card collection surface;
- 4) does not have a hinged lid over a card collection surface; and
- 5) cannot have a card collection surface at a same top surface as the card receiving area.

Additionally, the technology of Huen does not readily combine with the combined technologies of Albrecht in view of Johnson '085. To locate the system of Huen over the card collection surface of Albrecht in view of Johnson, the ability to remove sets of

randomized cards from the combined system would be defeated, as Huen dispenses **ONLY** single cards one-at-a-time from the device. That **suggested combination of Huen** would specifically frustrate the batch shuffling effect of providing completely removeable shuffled sets (e.g., at least one deck) of cards from a shuffling device of **Albrecht**. As the combined system of Albrecht in view of Johnson '085 would be clearly rendered far less efficient by having the card dispensing system of Huen added over an elevator of Albrecht, it is not obvious to add a system to greatly reduce the specific objective of both Albrecht and Johnson '085, the ability to provide a completely shuffled set of cards to a dealer. **Even if the combination were made, the lid of Huen would not be positioned over a single card collection surface as recited in the claims.**

Not only would the addition of a Huen lid delivery system to the combination of Albrecht in view of Johnson deteriorate the shuffled set providing ability of the shuffler, but it would require dramatic, complex and valueless modifications in the combined shuffling system. Because the cover of Huen is integrally functional in the delivery of individual cards, and the cards must be maintained flush with the rubber ejectors on Huen, the elevators of Albrecht in view of Johnson '085 would have to be incrementally moved upwards after the removal of each individual card. That would be a time-consuming and inefficient way of using the Albrecht in view of Johnson '085 system and it would detract from the system performance and complicate its operation, it would make manual removal of multiple cards impossible. **One skilled in the art would not combine the references as asserted in the rejection as the actual construction would be detrimental to performance of the shuffler and slow its operation down.**

It must be repeatedly emphasized that the cover on Huen is there for a specific and precise functional purpose in Figures 1 and 2, the movement of cards by the lid itself. In Figures 3 and 4, the Drawing is incomplete with respect to the description in the specification, but again, there are supposed to be studs 53 within the lid 37 that slide in order to move the cards out of the dispenser. Although not shown in either Figures 3 or 4, the specification is absolutely clear that the lid again has studs to move the cards, as shown in column 3, lines 29-53. Note especially column 3, lines 35-39 where Huen states:



“The rear side of the compartment 38 is provided by a wedge member 40 which is resiliently biased forwards by a spring 52 so as to urge the stack of cards 39 forwards against studs 53 on the lid 37.”

The purposes of the lid of Huen are clearly designed for the movement of individual cards sideways and out of the device. It is unobvious to use a lid of Huen for that purpose in a device taught by Albrecht in view of Johnson ‘085. It is further not obvious to destroy the function of the lid of Huen in a card dispensing device merely to assert that it could be placed in a **non-equivalent position** in a card shuffler. Note again that the cover of Huen is placed over the card insertion area and not a card removal area. **Therefore, adding the single card moving lid of Huen to Albrecht in view of Johnson would destroy the deck delivering capability of Albrecht in view of Johnson. Art cannot be used to modify structures where the function of the structure is destroyed or made unsuitable for its purpose (cf. *Ex parte Rosenfield*, 130 USPQ 113, PTO Bd of Appeals and Pat. Intf.)**

Additionally, it is to be noted that not one of Albrecht, Johnson ‘085 or Huen has both a card receiving access and a card collection access at the top of the device, as **recited in claim 1**. Albrechts card receiving access is fixed at the side of the device. Johnson’s card receiving access is at the side of the device, and Huen has no card collection surface at all. **It cannot be obvious to one skilled in the art to make a random design change in a combination of three references when none of the references has the specific structure recited in the claims.** Even the broadest interpretation of *KSR INT’L CO. v. TELEFLEX INC.* (No. 04-1350) 119 Fed. Appx. 282, 550 U.S. \_\_\_, reversed and remanded) states only that the Court found that obviousness can be proven by showing a combination of elements was “obvious to try” when there is a design need or market pressure to solve a problem and there are only a finite number of identified, predictable solutions. In the present fact circumstance, the necessary structural teaching is completely absent, so there can be no obviousness.

The combination of Albrecht in view of Johnson ‘085 and further in view of Huen must fail for at least those reasons.

The limitations of Claim 1 clearly establish novelty and unobviousness over each of the three references and the combination of the three references (Albrecht and Johnson and Huen) in at least the following ways.

**This limitation clearly establishes unobviousness over the combination of three references.**

B) The limitations of:

“...a single card collection surface in a card collection area for receiving randomized playing cards one at a time into the card collection area, the collection surface receiving cards so that all cards are received below the top surface of the device with access to the card collection surface being from the same top surface as the single card receiving area;...”

None of the three references teach:

“...access to the card collection surface being from the same top surface as the single card receiving area”

The card collection area of Johnson '085 is at a much lower level than the insert tray. The card insert area of Albrecht also is much lower than the level at which the card collection surface (36) must be raised for card removal. There is no separate collection surface of Huen, and the cards are then transported one-at-a-time to a delivery chute lower than the card insert area. The Applicants' recited configuration of the card insert area and the opening to the card collection surface being proximate the same elevator, and establishes unobviousness over the combination of the three references.

C) The limitation of:

“...the device moving individual playing cards one at a time directly to the single card collection surface;...”

Albrecht move cards first into compartments 30 and 32 of Albrecht and then drops them as a group onto the collection surface. Johnson '085 moves card directly, without an intervening set of compartments over a single card collection area, but then must remove cards from the card collection area from the bottom of the stack by pick-off rollers which

direct one card at a time to the delivery chute., which is located at a lower elevation proximate to the gaming table surface. This fact is distinguished in the immediately following limitations of claim 1 and later where it is shown that the combination of individual elements of the three references becomes and exercise in destruction of essential functions of each reference and just plain bad engineering. Huen merely ejects single cards out of slots located on the side of the device.

D) The immediately following limitations of:

“...an elevator for raising the single card collection surface so that at least some randomized cards are elevated for removal from the top surface of the device; and

a moveable cover over the elevator and fixed along one edge of the cover to the top surface.”

Johnson '085 **does not have** an elevator that raises randomized cards for removal. Rather, the grippers raise sets of cards for shuffling and then individual cards are picked off the bottom of the randomized set. Albrecht does have an elevator (**but no moveable cover thereon, and no moveable hinged cover**) that raises cards to the top for removal, but that top of the device is not part of the same top surface as with the card receiving area. Huen has a moveable cover, but that cover is instrumentally necessary for the physical movement of individual cards out of the side slots of the Huen device and the card receiving area cannot be at a same top surface as the elevator of the card collection area as Huen has no card collection area **at all** in the device. Each of these limitations establishes unobviousness over the combination of all three references. One would have to combine teachings of the reference to the detriment of some of the references solely to move in a technical direction towards these limitations, yet never be able to establish those limitations based on the teaching of the references themselves.

A good example of this deficiency in the combination can be found in the disclosure cited by the Examiner that Albrecht desires a compact device. The device of Albrecht is not particularly compact because of the nature of the design in which a vertical elevator and a separate rack of compartments is used. A deck of standard cards

has 52 cards, so to completely randomize the cards with single cards in each slots, 52 compartments would be used, which creates a large vertical displacement, just for the compartments. The device must have two adjacent shafts from top to bottom, increasing the width. But more importantly, the shuffling mechanism itself requires the vertical array of compartments (30 and 32) and the card collection tray below that. To minimize the height of the shaft 88, Albrecht would need to reduce the number of chambers in the compartments (30 and 32). This reduces the randomization effect of the shuffler significantly, as only that number of cards as there are chambers can be randomized at one time, as cards are fed from their previous order in the input area of cards. This is a highly deficient system, unless large numbers of chambers are used. However, as more and more chambers are used, the height of the compartments (30 and 32) increases, and the height of the shaft below the compartments (30 and 32) down to the collection surface 36 must also increase.

One additional problem with the proposed combination of Albrecht and Johnson '085 is that both Johnson and Albrecht have card input regions (card receiving compartment) and card removal regions (access to the card collection area) at completely different elevations, which is excluded by the claims. Combining Huen with Albrecht and Johnson does not overcome that fault. That combination is not obvious based on the teachings of the references. The claimed technology has the card input openings and the card output opening at the same surface.

Additionally, the use of the Johnson '085 shuffling system in an elevator system such as Albrecht is neither obvious nor structurally insignificant. The Johnson '085 gripping shuffler is complex enough, with the grippers lifting sections of sets of cards to insert cards, but then adding an elevator to the bottom of the same collection surface (rather than directly picking them off as done by Johnson '085) adds significant technical complexity to the device, where there are already grippers and lifting devices. Prospectively this is a complex route to move, even if Applicants achieved it.

It is long-standing Patent Law doctrine that "...one skilled in the art would not modify the device...to make it unsuitable for its intended purpose." (*Ex parte Rosenfeld*, (PTO Board of Patent Appeals, 1959), 130 U.S.P.Q. 113). In this case, the substitution of the elevator of Albrecht for the shuffling mechanism of Johnson '085 would remove the

need for the elevators of Albrecht, as Johnson '085 picks individual cards from the bottom of the set of randomized cards. As the combination requires the removal of elevators, then the combination would not meet the claimed construction that requires elevators. In addition, the use of the card moving cover of Huen would be complex, defeat the ability of sets of cards to be provided (as recited in the claims), and provide no benefit to the system. That is an insupportable combination under 35 U.S.C. 103(a).

The function of the Johnson '085 shuffler must be appreciated to see how that structure does not teach the technology claimed herein. Although that reference teaches a card collection chamber over which cards are raised and lowered in groups, and in which cards are separated into separate sets for intermediate placement of single cards, the collection surface is rigid, immovable and does not move in any direction. It is especially not elevated for removal of playing cards. Cards are removed from the bottom of the set of cards on the collection surface by nip rollers 29 and 30 to exit the delivery end 43 of the shuffler at its lowest elevation. There is no elevation of the card collection surface to assist manual removal of playing cards at the top of the device and there is no moveable cover over the card collection surface or any other structure in Johnson '085.

It is further to be noted that the card collection surface of Johnson '085 is stationary (the bottom card collection surface DOES NOT MOVE) and the grippers move up and down adjacent the shaft. The card collection surface does not move.

It is to be further and critically noted that neither Albrecht nor Johnson '085 shows the moveable cover element recited in claim 1 (and all claims dependent therefrom), and in claims 30 and 35. **The teachings of Huen of adding a card ejecting lid have been thoroughly refuted.** On this basis alone, claim 1 (and all claims dependent therefrom), and claims 30 and 35 must be considered unobvious and patentable. The Johnson '085 reference adds nothing to the combination of references that overcomes the absolute and critical failure of the combination of Albrecht and Huen.

Applicants feel compelled to note that the fact that the shuffling mechanisms of the three references are so vastly different, they cannot be so gratuitously combined as is done in these rejections. Even though their objective is a unifying shuffling operation,

the underlying structures and mechanisms are so vastly different in an engineering sense that the picking and choosing of the diverse elements for combination is like an attempt to create a fantastical animal, with organs and pieces from diverse animals that do not prospectively fit together in a simple or logical step. The attempt to select diverse components from a carousel shuffler (Johnson '248), a momentum evacuation of chambers with gravity drop (Albrecht), and a grip and lift with bottom of the set pick off rollers (Johnson '085) is such a fantastic creature that has no logical prospective intent than to meet the limitations of the present claims.

The following claim chart will illustrate why the rejection under 35 USC 103(a) is in error with respect to claim 30. This rejection must fail as claim 30 contains the following limitations which have already been discussed and distinguished with respect to claims 1 and 23:

**“...directly from the single card receiving area, the collection surface receiving cards so that all cards are received below the top surface of the device;**

**an image capture device that reads the rank and suit of each card after it has begun leaving the single card receiving area and before being received on the card collection surface;**

**an elevator for raising the collection surface so that at least some randomized cards are elevated for manual removal of playing cards from the top surface of the device; and**

**a moveable cover over the elevator and fixed along one edge of the cover to the top surface.**

This claim is unobvious because of at least those limitations.

**This claim also recites the presence of a moveable cover, an element that is not shown by any reference in the combination. On this basis alone, the claims must be considered further and independently novel and unobvious.**

The following claim chart will illustrate why the rejection under 35 USC 103(a) is in error with respect to claim 37. This rejection must fail.

CLAIM 37	JOHNSON	COMMENTS
A method of randomizing a group of cards, comprising the steps of: placing a group of cards to be randomized into a card in-feed tray;	Disclosed by Johnson.	
removing cards individually from the card in-feed tray and delivering the cards into	Cards are moved individually.	
a card collection area, the card collection area having a moveable lower surface, and a stationary opening for receiving cards from the in-feed tray;		<b>Johnson has an IMMOVEABLE card collection area with a stationary opening.</b>
elevating the moveable lower surface to a randomly determined height;		<b>Johnson ELEVATES SUBSETS OF CARDS AND DOES NOT ELEVATE THE COLLECTION SURFACE.</b>
grasping at least one edge of a group of cards in the card collection area at a point just above the stationary opening;		As noted above, Johnson '085 grips individual sets of cards for insertion of cards, but never elevates cards for removal and removes cards from the bottom of the card collection surface.
lowering the moveable lower surface to create an opening in a stack of cards formed on the lower surface, the opening located just beneath a lowermost point where the cards are grasped;	<b>Johnson 085 never raises the card collection surface to create an opening, and cannot create an opening between cards.</b>	As noted above, Johnson '085 grips individual sets of cards for insertion of cards, but never elevates cards for removal and removes cards from the bottom of the card collection surface.
inserting a card removed from the in-feed tray into the opening;		As noted above, Johnson '085 grips individual sets of cards for insertion of cards, but never elevates cards for removal and removes cards

		from the bottom of the card collection surface.
after randomizing all cards, elevating a collection of randomized cards <u>seated on the single moveable card collection surface so that the randomized cards may be manually removed from a top of the playing card randomizing device</u> ; and	<b>There is no elevation of a collection of randomized cards for removal, but picking off of cards from the bottom of the shuffled set.</b>	<b>This step is never performed by Johnson '085, and the elevation of a complete set by a system such as Albrecht would require use of a system in Johnson '085 that would disable their ability to randomize (shuffle) playing cards.</b>
Reading at least the rank of each card after it is individually removed from the card in-feed tray and before it has been inserted into the opening.		Johnson '085 has an opening into which cards are inserted. Albrecht has a differently located card-reading system.

The failure of Johnson to move the card collection surface has been shown to create a dead zone of cards that remain on the collection surface during shuffling, so that initial cards put onto the collection surface are not shuffled.

The additional limitations establish unobviousness over the combination of the three references, as discussed above with respect to claims 1 and 37.

Again, Applicants feel compelled to note that the fact that the shuffling mechanisms of the three references are so vastly different, they cannot be so gratuitously combined as is done in these rejections. Even though their objective is a unifying shuffling operation, the underlying structures and mechanisms are so vastly different in an engineering sense that the picking and choosing of the diverse elements for combination is like an attempt to create a fantastical animal, with organs and pieces from diverse animals that do not prospectively fit together in a simple or logical step. The attempt to select diverse components from a carousel shuffler (Johnson '248), a momentum evacuation of chambers with gravity drop (Albrecht), and a grip and lift with bottom of the set pick off rollers (Johnson '085) is such a fantastic creature that has no logical prospective intent than to meet the limitations of the present claims.



The following analysis will illustrate why the rejection under 35 USC 103(a) is in error with respect to claim 43. This rejection must fail for the same reasons as these limitations added to the claims establish unobviousness with respect to claims 1 and 30 as argued above.

**...a card receiver for accepting a group of cards to be shuffled by insertion of cards from an opening level with the gaming table surface;**

a randomizing system for randomizing the order of an initial set of playing cards;

a single collection surface for receiving all randomized cards;

**an elevator for raising the single collection surface to an elevation wherein all randomized cards may be manually removed through the gaming table surface;**

**a moveable cover hinged along one edge of the cover and moveable above the elevator; and...**

The rejection must fail for the reasons described in the previous response that no reference of record describes a remote control for the operation of the shuffling device. All of the references are manually directed by a dealer physically in contact with the shufflers, and no device has any remote controls.

Each of the remaining independent claims has been clearly shown to be unobvious over the combination of the three references cited in this rejection. The rejection is in error and must be withdrawn.

Claims 12-13, for example, address fine control of the collection surface on the elevator position. The elevator shaft of Johnson '085 is stationary and the grippers move up and down adjacent the shaft. The card collection surface does not move.

3. Claims 14-21 and 26-28 have been rejected under 35 USC 103(a) as unpatentable over Johnson '248 in view of Albrecht and further in view of Johnson 5,683,085 when further in view of U.S. Patent No. 5,240,140 (Huen) and even when further

considered with Purton et al. (International Patent Application Publication WO 00/51076) [Applicants note the U.S. equivalent of U.S. patent No. 6,629,894]. Claims 26-28 have been canceled.

Each of these claims is directly or indirectly dependent from the claims rejected in the previous paragraph or claims with similar limitations as those discussed above. The additional Huen reference does not teach the limitations that were the basis for establishing unobviousness under 35 USC 103(a) above and there is no basis for asserting those limitations to be obvious from the individual or combined teachings of these references. The rejection must fail for at least that reason, even without conceding that Johnson II does or does not teach the limitations for which it has been cited.

Each of these claims is dependent claims from the claims rejected in paragraph 2. The additional Purton reference does not teach the limitations that were the basis for establishing Novelty under 35 USC 102(b) and unobviousness under 35 USC 103(a) in arguments presented in paragraph 2 and there is no basis for asserting those limitations to be obvious from the individual or combined teachings of these references. The rejection must fail for at least that reason, even without conceding that Albrecht does or does not teach the limitations for which it has been cited. **There is no teaching in Purton of an automatically moving cover fixed along one edge as recited in the claims.**

It must be noted that the rejection of record slips back and forth from one technology to another, ignoring previous statements, even though these claims are dependent from earlier rejected claims.

The rejection cites many lines of text from the references, as if the volume of citations proves a point. In fact, the volume of citations, without focusing on specific disclosure therein merely complicates the rejection, confuses issues, and obfuscates any underlying content of the rejection.

The addition of Purton does not improve on the deficiencies cited in paragraph 2) above. It is to be noted that even the "moveable cover" of Purton (element 521 in Figures 18 and 19) do not assist in this rejection. That cover is hinged at the base of the shuffler and when opened, exposes the internal card moving elements and does not provide access over the card insert area or the card collection area.

Purton also verifies or sorts cards, and is not disclosed as shuffling cards. It is merely related art with respect to a card handling device.

**CONCLUSION**

All rejections of record have been shown in detail to be in error. The rejection should be reversed and all claims should be indicated as allowable.

Applicants believe the claims are in condition for allowance and request reconsideration of the application and allowance of the claims. The Examiner is invited to telephone the below-signed attorney at 952-832-9090 to discuss any questions that may remain with respect to the present application.

Respectfully submitted,  
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Date 22 JULY 2009

By

Mark A. Litman  
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I hereby certify that this correspondence is being sent by facsimile transmission or deposited with the United States Postal Service as first class mail in an envelope addressed to Box: APPEAL BRIEF - PATENTS, P.O. BOX 1450; Commissioner for Patents, Alexandria, VA 22313-1450 on 22 JULY 2009.

Name: Mark A. Litman

Signature

## CLAIMS APPENDIX

1. (ON APPEAL) A device for forming a random set of playing cards comprising:
  - a top surface and a bottom surface of said device;
  - a single card receiving area for receiving an initial set of playing cards with access to the single card receiving area at the top surface;
  - a randomizing system for randomizing the order of an initial set of playing cards;
  - a single card collection surface in a card collection area for receiving randomized playing cards one at a time into the card collection area, the collection surface receiving cards so that all cards are received below the top surface of the device with access to the card collection surface being from the same top surface as the single card receiving area;
  - the device moving individual playing cards one at a time directly to the single card collection surface;
  - an image capture device that reads the rank and suit of each card before being received on the card collection surface;
  - an elevator for raising the single card collection surface so that at least some randomized cards are elevated for removal from the top surface of the device; and
  - a moveable cover over the elevator and fixed along one edge of the cover to the top surface.
2. (ON APPEAL) The device of claim 1 wherein the elevator raises all randomized cards above the top surface of the device and the moveable cover is automatically raised to allow the randomized cards to rise above the top surface of the device.
3. (ON APPEAL) The device of claim 1 wherein at least one pick-off roller removes cards one at a time from the card receiving area and moves cards one at a time towards the randomizing system and the image capture device can read a card only after it has been moved by the at least one pick-off roller.

4. (ON APPEAL) The device of claim 3 wherein at least one pair of rollers receives each card from the at least one pick-off roller before the image capture device can read each card.
5. (ON APPEAL) The device of claim 4 wherein a microprocessor controls movement of the pick-off roller and the at least one pair of rollers.
6. (ON APPEAL) The device of claim 4 wherein when a first card being moved by the pick-off roller is being moved by the at least one pair of rollers, movement of the pick-off roller is altered so that no card other than the first card is moved by either the pick-off roller or the at least one pair of rollers.
7. (ON APPEAL) The device of claim 1 wherein the randomization system moves one card at a time into an area overlying the collection surface after the one card has been read for suit and rank.
8. (ON APPEAL) The device of claim 1 wherein one card at a time is positioned into a randomized set of playing cards over the collection surface.
9. (ON APPEAL) The device of claim 7 wherein the collection area is bordered on two opposed sides by two movable card gripping elements.
10. (ON APPEAL) The device of claim 9 wherein an insertion point to the card collection area is located below a bottom edge of the two movable card gripping elements.
11. (ON APPEAL) The device of claim 9 wherein the card collection surface is vertically positionable within the card collection area.

12. (ON APPEAL) The device of claim 11 wherein the card collection surface is moved by a motivator that is able to move incremental vertical distances that are less than the thickness of a playing card.

13. (ON APPEAL) The device of claim 12 wherein the motor is a stepper motor or an analog motor.

14. (ON APPEAL) The device of claim 1 wherein a sensor is present along a line of movement of cards in the device within the single card receiving area or adjacent the single card receiving area and after the image capture device, the sensor indicating a trigger position of a moving card to initiate a timed capture of an image by the image capture device.

15. (ON APPEAL) The device of claim 14 wherein at least one microprocessor is present in the device and the at least one microprocessor controls vertical movement of the card collection surface and camera triggering.

16. (ON APPEAL) The device of claim 14 wherein at least a second sensor identifies the position of the card collection surface so as to place a top card in the collection area at a position that is level with or above the bottom of at least one card gripping element that is movable from at least one side of the collection area towards playing cards within the card collection area.

17. (ON APPEAL) The device of claim 15 wherein the microprocessor is programmed to determine a distance that the card collection surface must be vertically moved to position at least one specific card at a bottom edge of the at least one card gripping element when the card gripping element moves to contact cards within the card collection area.

18. (ON APPEAL) The device of claim 16 wherein the at least one card gripping element comprises at least two gripping elements, at least one of which moves from a side of the collection area towards playing cards within the card collection area.

19. (ON APPEAL) The device of claim 15 wherein the microprocessor directs movement of an individual card into a gap in cards in the collection area between two segments of cards created by support of cards by at least one card gripping element.

20. (ON APPEAL) The device of claim 17 wherein the microprocessor is programmed to lower the card collection surface within the card collection area after the at least one element has contacted and supported cards within the card collection area, creating two segments of cards and a gap between the segments.

21. (ON APPEAL) The device of claim 20 wherein the microprocessor directs movement of an individual card into the gap, between the two segments of cards.

22. (ON APPEAL) The device of claim 1 wherein a microprocessor is controllably connected to the device, the microprocessor directing movement of playing card moving elements within the device, the microprocessor randomly assigning potential positions for each card within the initial set of playing cards, and then directing the device to arrange the initial set of playing cards into those randomly assigned potential positions to form a randomized final set of playing cards with each card in the randomized set having been read for at least rank.

**23 -29 (CANCELED)**

30. (ON APPEAL) A device for forming a random set of playing cards comprising:  
a top surface and a bottom surface of said device;  
a single card receiving area for receiving an initial set of playing cards;  
a randomizing system for randomizing the order of an initial set of playing cards;



a collection surface in a card collection area for receiving randomized playing cards one at a time into the card collection area directly from the single card receiving area, the collection surface receiving cards so that all cards are received below the top surface of the device;

an image capture device that reads the rank and suit of each card after it has begun leaving the single card receiving area and before being received on the card collection surface;

an elevator for raising the collection surface so that at least some randomized cards are elevated at least to for manual removal of playing cards from the top surface of the device; and

a moveable cover over the elevator and fixed along one edge of the cover to the top surface.

#### **CLAIMS 31- 36 (CANCELED)**

37. (ON APPEAL) A method of randomizing a group of cards, comprising the steps of:  
placing a group of cards to be randomized into a card in-feed tray of a playing card randomizing device;

removing cards individually from the card in-feed tray and delivering the cards directly and one-at-a-time into a card collection area, the card collection area having only a single moveable lower surface, and a stationary opening for receiving cards from the in-feed tray;

elevating the moveable lower surface to a randomly determined height;

grasping at least one edge of a group of cards in the card collection area at a point just above the stationary opening;

lowering the moveable lower surface to create an opening in a stack of cards formed on the lower surface, the opening located just beneath a lowermost point where the cards are grasped;

inserting a card removed from the in-feed tray into the opening;

after randomizing all cards, elevating a collection of randomized cards seated on the single moveable card collection surface so that the randomized cards may be manually removed from a top of the playing card randomizing device; and reading at least the rank of each card after it is individually removed from the card in-feed tray and before it has been inserted into the opening.

38. (ON APPEAL) The method of claim 37 wherein after a card has been inserted, and when a presence of at least one additional card in the card in-feed tray is sensed, the elevator moves to another randomly determined height, creating another opening.

**39- 42 (CANCELED)**

43. (ON APPEAL) An automatic card shuffler comprising:  
a housing capable of being mounted flush with a gaming table surface;  
a card receiver for accepting a group of cards to be shuffled by insertion of cards from an opening level with the gaming table surface;  
a randomizing system for randomizing the order of an initial set of playing cards;  
a single collection surface for receiving all randomized cards;  
an elevator for raising the single collection surface to an elevation proximate wherein all randomized cards may be manually removed through the gaming table surface;  
a moveable cover hinged along one edge of the cover and moveable above the elevator; and  
a microprocessor for controlling the operation of the card shuffler.

44. (ON APPEAL) The automatic card shuffler of claim 43 further comprising an automatically movable cover that is closed at least part of the time over at least one of the card receiver and collection surface.

45. (ON APPEAL) An automatic card shuffler, comprising:

- a microprocessor;
- a card randomization mechanism;
- a controller for controlling the card randomization mechanism by means of a user-manipulated remote control device; and
- a card moving sequence programmed in memory that enables the automatic card shuffler to move a set of cards from a card receiving position to a card collection area in the shuffler in a non-shuffling event, and to read the rank and suit of each card between the card receiving position and the card collection area in the non-shuffling event.

**46- 54 (CANCELED)**

55. (ON APPEAL) A device for forming a random set of playing cards comprising:

- a top surface and a bottom surface of said device;
- a single card receiving area for receiving an initial set of playing cards;
- a randomizing system for randomizing the order of an initial set of playing cards;
- a single collection surface in a card collection area for receiving randomized playing cards one at a time into the card collection area, the collection surface receiving cards so that all cards are received above the single collection surface and below the top surface of the device;
- an elevator for raising the single collection surface to raise at least some randomized cards; and
- a moveable cover hinged along one edge of the cover and moveable over the elevator.

**EVIDENCE APPENDIX**

Neither Appellants nor their counsel in this Appeal are aware of any secondary or supplemental evidence submitted during the prosecution of this Application that must be considered by the Board of patent Appeals in this decision.

**RELATED PROCEEDINGS APPENDIX**

Neither Appellants nor their counsel on this Appeal are aware of any proceedings before the US Patent and Trademark Office or any US Judicial or Quasi-Judicial authority that relates directly towards any issues in this Appeal.